

ABSTRACT OF THE DISCLOSURE

A variable reluctance generator has phase windings and a bias winding. By controlling the excitation produced by the bias winding, the speed of the machine or the DC link, a power converter using only diodes can supply power to a DC bus. A method of operating a variable reluctance machine as a generator, the machine having at least one phase winding, includes creating a bias flux linking the or at least one phase winding, and limiting the phase voltage to a magnitude below that otherwise induced in the phase winding by the bias flux.